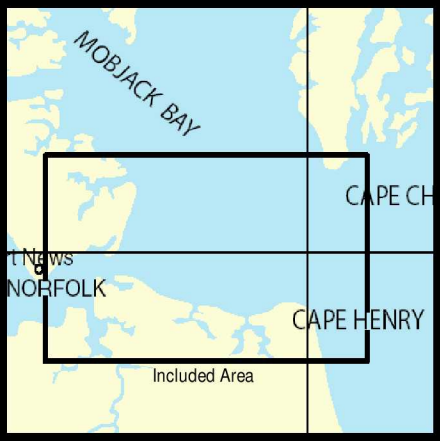
BookletChart™

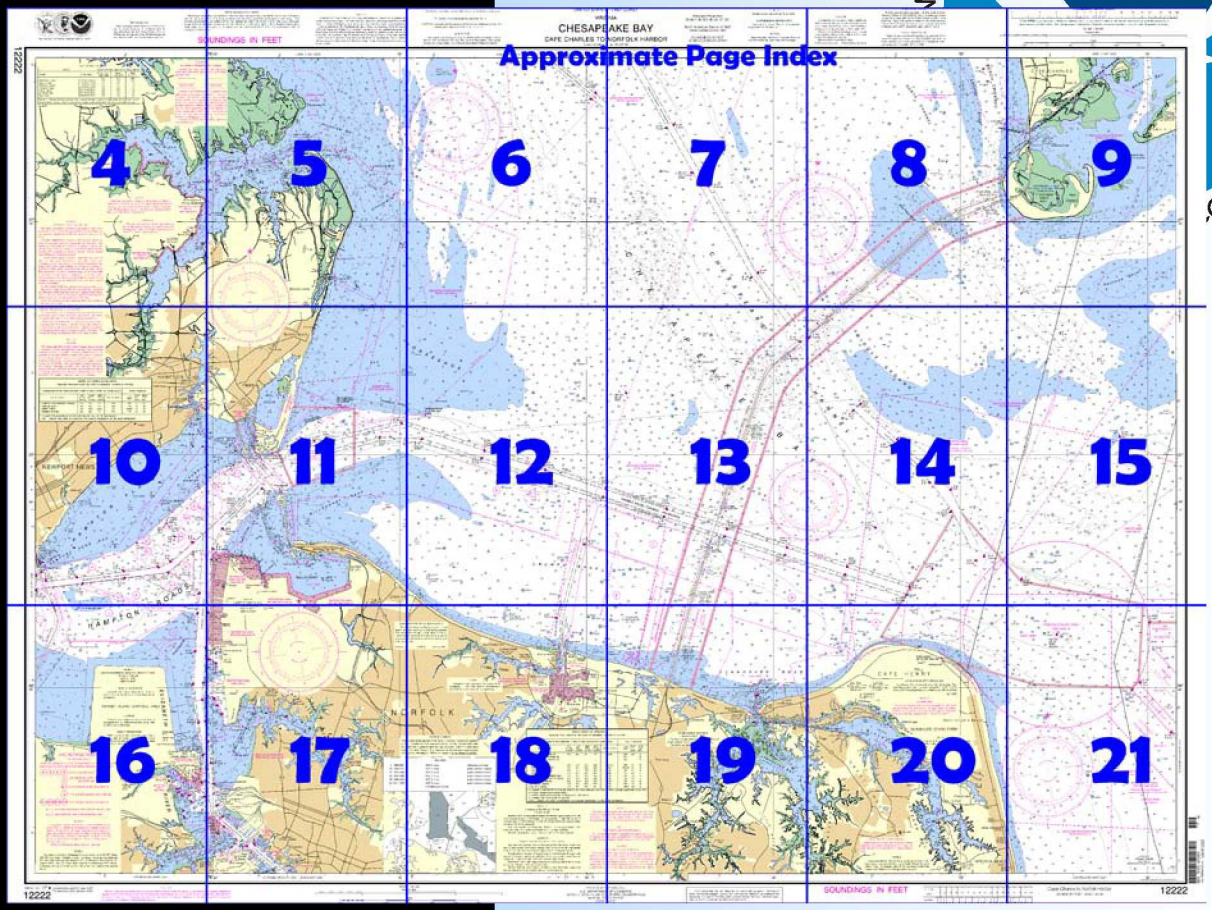
Chesapeake Bay - Cape Charles to Norfolk Harbor

(NOAA Chart 12222)



A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ☑ *Complete, reduced scale nautical chart*
- ☑ *Print at home for free*
- ☑ *Convenient size*
- ☑ *Up to date with all Notices to Mariners*
- ☑ *United States Coast Pilot excerpts*
- ☑ *Compiled by NOAA, the nation's chartmaker.*



Home Edition (not for sale)

Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
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What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

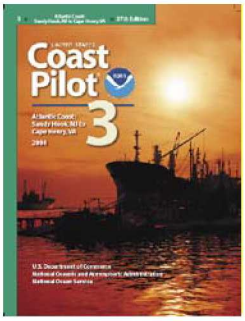
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 3, Chapter 9 excerpts]

(21) **Cape Henry Light** (36°55.6'N., 76°00.4'W.), 164 feet above the water, is shown from an octagonal, pyramidal tower, upper and lower half of each face alternately black and white, on the beach near the turn of the cape.

(26) **Chesapeake Bay Bridge** extends from Cape Charles to a point 6 miles westward of Cape Henry. Channel buoys, lights, daybeacons and fog signals mark the openings at Chesapeake and Thimble Shoal Channels. At night the floodlighted tunnel houses are more prominent than the lights marking the channels.

(41) The current velocity is 1.0 knot on the flood and 1.5 knots on the ebb in Chesapeake Bay Entrance.

(52) Thimble Shoal Channel is a **Regulated Navigation Area** and draft limitations apply. A vessel drawing less than 25 feet may not enter the channel, unless the vessel is crossing the channel.

(53) **Lynnhaven Roads** is used as an anchorage. The dumping ground in the western part has shoals and obstructions with depths as little as 11 feet; elsewhere depths are 20 to 28 feet.

(54) There are two small craft openings in the Chesapeake Bay Bridge-Tunnel south of Thimble Shoal Channel. Each span has a clearance of 21 feet.

(55) **Lynnhaven Inlet**. In 2000, the controlling depth in the entrance channel was 6½ feet. The inlet is marked by lights. **Lynnhaven Bay** has a turning basin south of the highway bridge over the inlet. The bay has depths of 1 to 10 ft.

(56) A dredged channel leads eastward from the north end of the large basin, and another dredged channel leads eastward from the south end; the southerly channel is marked by a light and daybeacons. The north and south channels converge near Daybeacon 6 and continue to **Broad Bay.** The channel to Broad Bay is marked by daybeacons, and a light at the east end. In 1998, the depth was 5½ feet (7½ feet at midchannel) in the northerly channel, thence 7 to 10 feet in the basin with lesser depths of 3½ to 6½ feet in the NW corner, thence 7½ feet (9 feet at midchannel) in the southerly channel to Daybeacon 6; thence a depth of 8 feet was in the channel eastward to Broad Bay.

(58) An alternate route to Broad Bay is through **Long Creek,** which branches northeastward from the channel in the vicinity of Daybeacon BL. In 1991, the depths were 5½ feet (7 feet at midchannel) from Daybeacon BL to Great Neck Road bridge; thence 8 feet to Broad Bay.

(59) Depths in Broad Bay are 6 to 7 feet. A marked channel leads southeastward through **The Narrows.** In 1998, the controlling depth was 6 feet.

(60) Small-craft facilities are in Lynnhaven Inlet and both forks of Linkhorn Bay.

(62) A channel in Little Creek leads to a basin off the railroad terminal. In 1998, the depth was 20 feet. The channel is marked by a **177°30'** lighted entrance range and lights. **Little Creek Coast Guard Station** is east of the railroad terminal.

(63) **Fishermans Cove** has fuel and berthing facilities. The **speed limit** is 5 knots.

(64) Naval **danger zones** and **restricted areas** extend northward from Little Creek to the edge of Thimble Shoal Channel.

[Coast Pilot 3, Chapter 11 excerpts]

(7) **Horseshoe** is a shoal that extends several miles out from between Old Point Comfort and Back River. The eastern half has depths of 13 to 18 feet; the western half, 6 to 11 feet. Local vessels drawing 7 feet or less use lanes through the fishtraps on Horseshoe when navigating between Hampton Roads and York River or Mobjack Bay. The tidal current velocity is 0.5 knot over the Horseshoe and is rotary, turning clockwise.

(8) A naval **restricted area** extends eastward and southward of Old Point Comfort, and a **danger zone** of the **Fort Monroe** firing range extends to seaward from a point 1.5 miles northward of the point.

(10) **Back River**. A firing and bombing **danger zone** is north of the entrance to Back River. The approach from southeast through a lane in the fishtraps is marked.

(11) 2 miles above the mouth, Back River divides into **Northwest** and **Southwest Branches,** which have depths of 2 to 5 feet. In 1979, the marked channel 3 miles from the mouth of the river to the Langley fuel pier had a depth of 12 feet. In 1982, shoaling to 3 feet was on the south side of the channel 150 yards east-northeast of Light 9. In 1985, a bare shoal was 60 feet north of Light 9. The Langley Yacht Club, south of the fuel pier, has gasoline and supplies; the depth in the basin is 4 ft.

(13) A marina on the south side of Back River, east of **Windmill Point** has gasoline, diesel fuel, and supplies. The depth is 6½ feet.

(14) **Harris River** has depths of 6 feet in a marked channel that leads to a marina inside **Stony Point.** Supplies, gasoline, diesel fuel, and berths are available.

(16) The highway and rail bridges over Southwest Branch above Willoughby Point, have a clearance of 6 feet.

Table of Selected Chart Notes

NOTE B
HAMPTON ROADS TUNNEL
APPROACH SPANS
HOR CL 45 FT
VERT CL 10 FT

Corrected through NM Sep. 5/09
Corrected through LNM Sep. 1/09

HEIGHTS
Heights in feet above Mean High Water.

Mercator Projection
Scale 1:40,000 at Lat. 37° 00'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

NOTE I
Vessels should use extreme caution while navigating in Little Creek Harbor due to frequent and unannounced naval diving operations.

SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 3 for important supplemental information.

THE NARROWS
A depth of 6 feet for a width of 90 feet was available in the improved channel through The Narrows.
Dec 2007

CAUTION
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
⊙(Accurate location) o(Approximate location)

PLANE COORDINATE GRID
(based on NAD 1927)
The Virginia State Grid (South Zone) is indicated on this chart at 20,000 foot intervals thus: -|-
The last three digits are omitted.

For Symbols and Abbreviations see Chart No. 1

LOCAL MAGNETIC DISTURBANCE
Differences of as much as 6° from the normal variation have been observed 3 to 17 nautical miles offshore from Cape Henry to Currituck Beach Light.

AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

WARNING
The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Norfolk, VA	KHB-37	162.550 MHz

CAUTION
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

NOTE F
MONITOR-MERRIMAC MEMORIAL BRIDGE-TUNNEL
APPROACH SPANS
HOR CL 70 FT
VERT CL 30 FT

RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION
SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area *Cable Area*

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.
Covered wells may be marked by lighted or unlighted buoys.

HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83) which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.529" northward and 1.221" eastward to agree with this chart.

POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

NOTE G
TRAFFIC SEPARATION SCHEME
The traffic separation scheme is designed to aid in the prevention of collisions at the approaches to Chesapeake Bay and does not supersede or alter the applicable Rules of the Road.
The RECOMMENDED routes for entering and departing from Chesapeake Bay are overprinted on this chart. The Northeast Approach is marked by a tinted magenta line centered on a line of fairway buoys which separates the courses of inbound and outbound vessels. Vessels should leave all buoys on their port hand.
It is RECOMMENDED that the following ships use the Southern Approach deep-water route when bound for Chesapeake Bay from sea or to sea from Chesapeake Bay: Deep-draft ships, drafts defined as 42 feet/12.8 meters or greater in fresh water, and naval aircraft carriers. Ships drawing less than 42 feet/12.8 meters may use the deep-water route when, in their master's judgment, the effects of ship characteristics, its speed, and prevailing environmental conditions may cause the draft of the ship to equal or exceed 42 feet/12.8 meters.
It is RECOMMENDED that a ship using the deep-water route:
Announce its intention on VHF-FM channel 16 as it approaches Chesapeake Bay Southern Approach Lighted Whistle Buoy "CB" on the south end, or Chesapeake Bay Entrance Lighted Whistle Buoy "CH", on the north end of the route;
Avoid, as far as practicable, overtaking other ships operating in the deep-water route;
Keep as near to the outer limit of the route which lies on the starboard side as is safe and practicable.
All other ships approaching the Chesapeake Bay traffic separation scheme should use the appropriate inbound or outbound traffic lane of the traffic separation scheme.
Traffic within the precautionary area may consist of vessels operating between Thimble Shoal and Chesapeake Channels and one of the established traffic lanes. Mariners are advised to exercise extreme care in navigating within this area. The normal Pilot Boarding Area is outlined by a magenta band.

NOTE M
LITTLE CREEK EXCLUSION ZONE
The Little Creek Exclusion Zone is a subset of an emergency restricted area. No vessel or persons may enter this area without permission of the Commanding Officer/Officer-in-charge of the Little Creek Amphibious Base. Vessels or persons may transit other portions of the restricted area at any time, but are subject to inspections from designated law enforcement patrols.

NOTE E
Numerous duck blinds, stakes, piles and pipes exist in the waterways of Lynnhaven Bay, Long Creek, Broad Bay and Linkhorn Bay. Submerged piles which have been located are charted but additional submerged piles may exist.

NOTE L
EMERGENCY RESTRICTED AREA
For the latest information regarding the regulations of any emergency restricted area, contact the Army Corps of Engineers, Norfolk District, Regulatory Branch at (757) 201-7653/7652.

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 3. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 5th Coast Guard District in Portsmouth, Virginia or at the Office of the District Engineer, Corps of Engineers in Norfolk, Virginia.
Refer to charted regulation section numbers.

LYNNHAVEN INLET TO BROAD BAY
Lynnhaven Inlet is subject to continual change. The controlling depth in the improved channel from 36°54'15.2" N 76°05'16.2" W to Broad Bay is 4 feet for a width of 90 feet.
Jun 2008

NOTE Z
NO-DISCHARGE ZONE, 40 CFR 140
Under the Clean Water Act, Section 312, all vessels operating within a No-Discharge Zone (NDZ) are completely prohibited from discharging any sewage, treated or untreated, into the waters. All vessels with an installed marine sanitation device (MSD) that are navigating, moored, anchored, or docked within a NDZ must have the MSD disabled to prevent the overboard discharge of sewage (treated or untreated) or install a holding tank. Regulations for the NDZ are contained in the U.S. Coast Pilot. Additional information concerning the regulations and requirements may be obtained from the Environmental Protection Agency (EPA) web site: http://www.epa.gov/owow/oceans/regulatory/vessel_sewage/.
Spo

NOTE H
CAUTION
The Chesapeake Bay Bridge-Tunnel Complex has on several occasions suffered damage from vessels due to adverse weather conditions. Currents in excess of three knots can be expected in the area. Mariners transiting this area are urged to be particularly alert in regards to the weather situation. The National Weather Service provides 24 hour weather broadcasting on 162.55 MHz. The Local Marine Operator also transmits weather information at 0100, 0700, 1300 and 1900 local time on 2538 and 2450 kHz. Transmitting schedules are subject to change, see Notice to Mariners. Maneuvering in close proximity of the bridge-tunnel complex is discouraged.

NOTE C
DANGER AREA
Area is open to unrestricted surface navigation but all vessels are cautioned neither to anchor, dredge, trawl, lay cables, bottom, nor conduct any other similar type of operation because of residual danger from mines on the bottom.

Additional information can be obtained at nauticalcharts.noaa.gov.

NOTE D
Chesapeake Bay Bridge - Tunnel
(Private Lights)
Trestles A & B - In each trestle section the fixed bridge opening for small craft consists of a group of 3 spans. A fixed green light marks the centerline of each span and fixed red lights mark the outermost bridge support piling on each side of the openings.
North Channel & Fishermans Inlet Bridges - A fixed green light marks each mid-channel with fixed red lights marking channel limits.
Fixed red obstruction lights mark each pier in Trestles C and D.

ANCHORAGE AREAS
110.168 (see note A)
Limits and designations of anchorage areas are shown in magenta. See chart 12253 for additional areas not shown on this chart.

(A) (B) (C) (D) NAVAL ANCHORAGE
(E) COMMERCIAL EXPLOSIVES ANCHORAGE
(E-1) EXPLOSIVES HANDLING BERTH
(G) NAVAL EXPLOSIVES ANCHORAGE
(G-1) (G-2) (G-3) (G-4) EXPLOSIVES HANDLING BERTH

ALL OTHER ANCHORAGES ARE FOR GENERAL USE
ALL OTHER BERTHS ARE FOR GENERAL USE

CAUTION
FISH TRAP AREAS AND STRUCTURES
Mariners are warned that numerous uncharted duck blinds and fishing structures, some submerged, may exist in the fish trap areas. Such structures are not charted unless known to be permanent.
Regulations to assure clear passage to and through dredged and natural channels, and to established landings, are prescribed by the Corps of Engineers in the Code of Federal Regulations.
Definite limits of fish trap areas have been established in some areas, and those limits are shown thus: ——— — ——— —
Where definite limits have not been prescribed, the location of fishing structures is restricted only by the regulations.

AUTHORITIES
Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and National Geospatial-Intelligence Agency.

SOURCE DIAGRAM
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

NOTE S
Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

THE NATION'S CHARTMAKER SINCE 1807

HORIZONTAL DATUM

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PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGrafix, offer this chart updated week y by NOAA for N and critical corrections. Charts are printed when ordered using Print-on-Demand t Editions are available 5-8 weeks before their release as traditional NOAA charts. Asl about Print-on-Demand charts or contact NOAA at 1-800-584-4683, http://Nau help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, http://Ocea help@OceanGrafix.com.

SOUNDINGS IN FEET

12222

76°20'

37°05'

TIDAL INFORMATION

PLACE NAME	(LAT/LONG)	Height referred to datum of soundings (MLLW) Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Fishermans Is and	(37°06'N/75°59'W)	3.4	3.2	0.1
Messick Point	(37°07'N/76°19'W)	2.6	2.5	0.2
Old Point Comfort	(37°00'N/76°18'W)	2.8	2.6	0.1
Hampton Roads	(36°57'N/76°20'W)	2.8	2.5	0.1
Craney Island	(36°54'N/76°20'W)	2.9	2.7	0.1
Lynnhaven Inlet	(36°54'N/76°05'W)	2.6	2.4	0.1
Cape Henry	(36°56'N/76°00'W)	3.5	3.2	0.1

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal curren predictions are available on the Internet from http://tidesandcurrents.noaa.gov.

(Jul 2009)

CAUTION

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Pipeline Area — Cable Area

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Covered wells may be marked by lighted or unlighted buoys.

NOTE J

Restricted area 334.275 begins at the entrance to Tide Mills Creek at 37° 03' 50" N, 76° 22' 00" W; thence along the shoreline of Langley Air Force Base 35 yards off the ordinary mean high water (MHW) mark to a point in the Northwest Branch of Back River at 37° 06' 40" N, 76° 22' 55" W.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

NOTE G

TRAFFIC SEPARATION SCHEME

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Joins page 10

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

North

See Note on page 5.

Notices to Mariners
d technology. New
Ask your chart agent
auticalCharts.gov,
eanGrafix.com, or

T

NOTE X

Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.

Additional information can be obtained at nauticalcharts.noaa.gov.

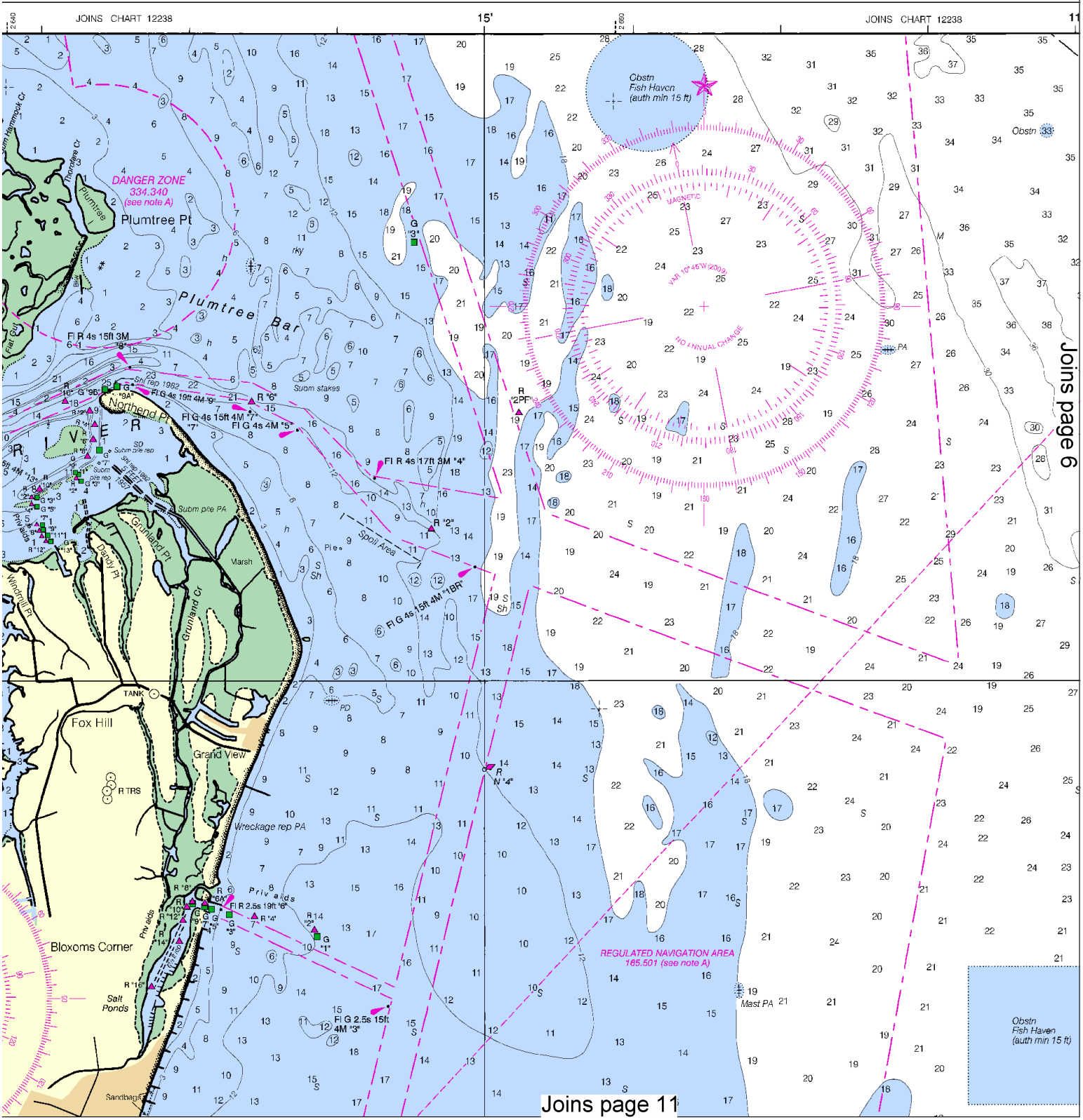
For Symbols and Abbreviations see Chart No. 1

COLREGS: International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: — — —

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and National Geospatial-Intelligence Agency.

C



This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:53333. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.

NOTE X

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UNITED STATES

VIRGI

CHESAPE

CAPE CHARLES TO I

Formerly C&GS 562, 1st Ed.

15' JOINS CHART 12238 11' 10'

Joins page 5

Joins page 12

Obstn Fish Haven (auth min 15 ft)

YORK RIVER ENTRANCE CHANNEL (use chart 12238)

R "2" Fl R 2.5s GONG

G "1YR" Fl G 2.5s

MAGNETIC VAR 10° 45'W (2009) NO ANNUAL CHANGE

Fl R 4s 17ft 3M "4"

Fl G 4s 15ft 4M "1BR"

Fl G 4s 4M "5"

R "6"

R "2PF"

R "2"

R "N "4"

G "1"

Fl G 2.5s 15ft 4M "3"

Fl R 2.5s 19ft "6"

R "4"

Spoil Area

Swom stakes

Wreckage rep PA

REGULATED NAVIGATION AREA 165.501 (see note A)

Mast PA

Obstn Fish Haven (auth min 15 ft)

Obstn

Obstns

S Cy

S M

Priv aids

6

North

Printed at reduced scale.

~~SCALE 1:40,000~~

Nautical Miles

1 ½ 0 1 2 3

Yards

1000 0 1000 2000 3000 4000 5000

See Note on page 5.

S - EAST COAST

GINIA

EAKE BAY

NORFOLK HARBOR

Ed., Mar. 1964 KAPP 559

Mercator Projection
Scale 1:40,000 at Lat. 37° 00'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

HEIGHTS
Heights in feet above Mean High Water.

SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 3 for important supplemental information.

CAUTION
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

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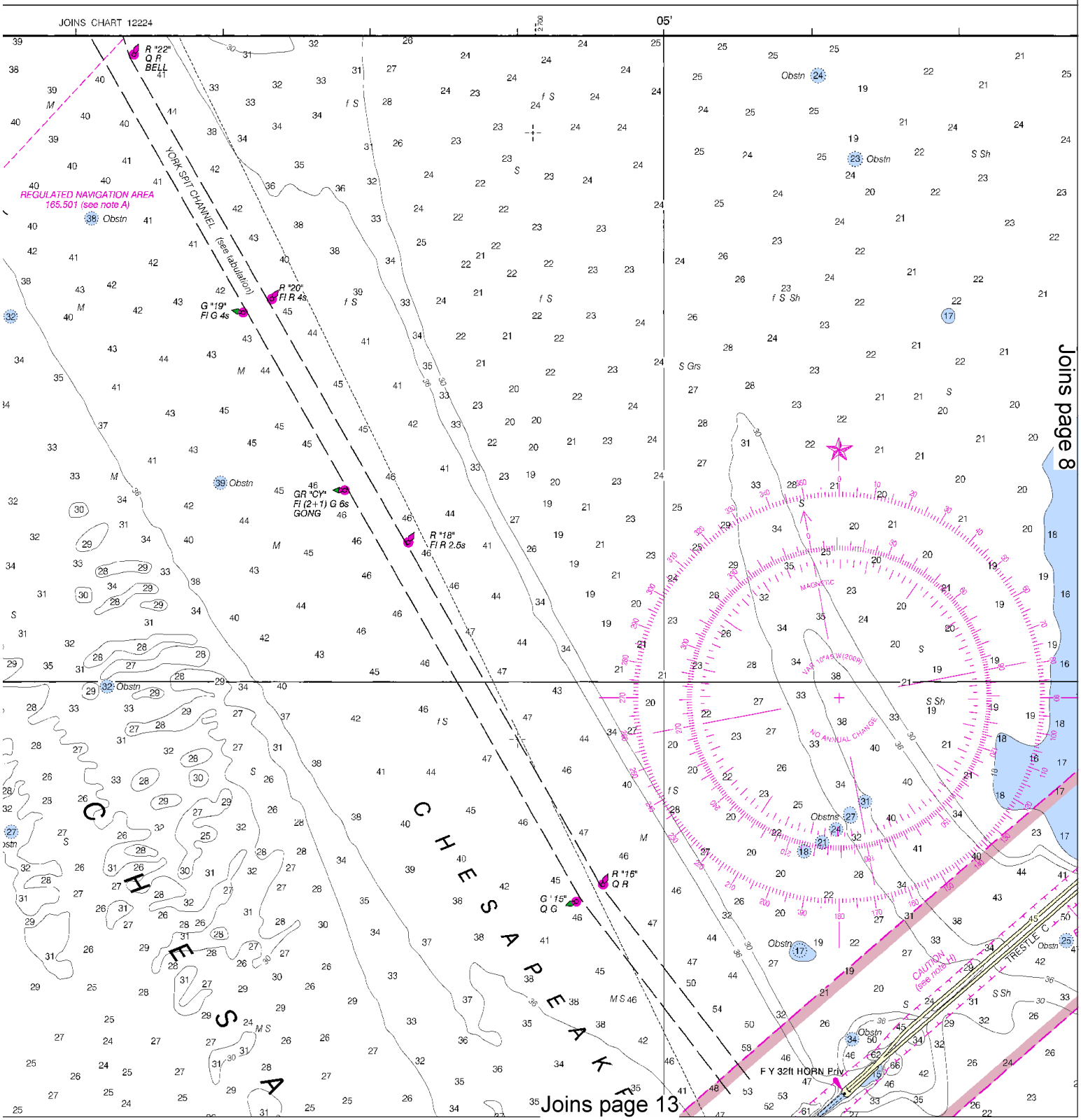


This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0810 2/23/2010,
NGA Weekly Notice to Mariners: 1010 3/6/2010,
Canadian Coast Guard Notice to Mariners: n/a .

Mercator Projection
Scale 1:40,000 at Lat. 37° 00'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

HEIGHTS
Heights in feet above Mean High Water.

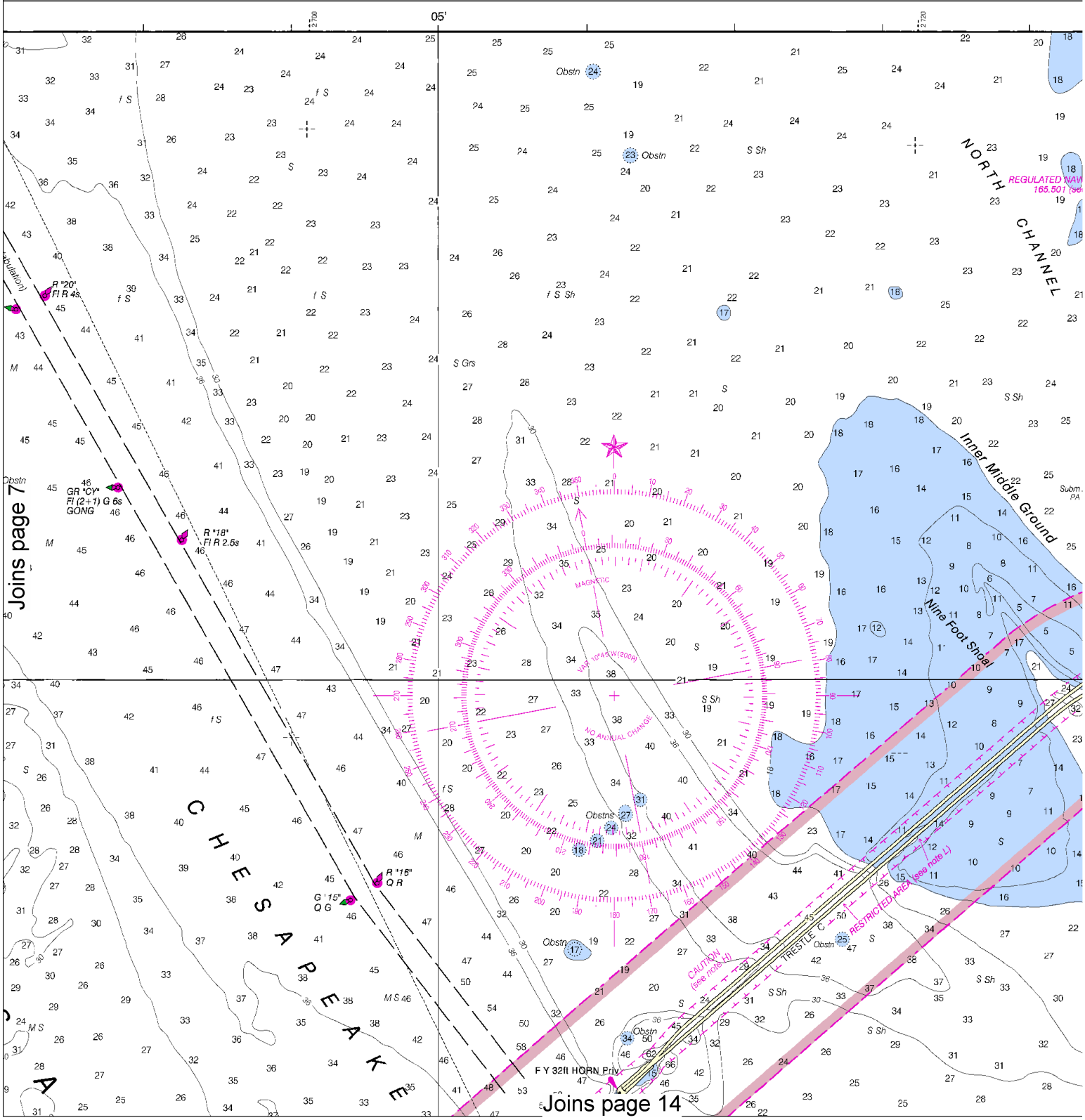
SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 3 for important supplemental information.

CAUTION
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
⊙(Accurate location) ○(Approximate location)

AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

RACING BUOYS
Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.



North

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles
1 ½ 0 1 2 3

Yards
1000 0 1000 2000 3000 4000 5000

See Note on page 5.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

LOGARITHMIC SPEED SCALE

1 2 3 4 5 6 7 8 9 10 15 20 25 30 40 50 60

To find SPEED, place one point of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the speed is 16.0 knots.

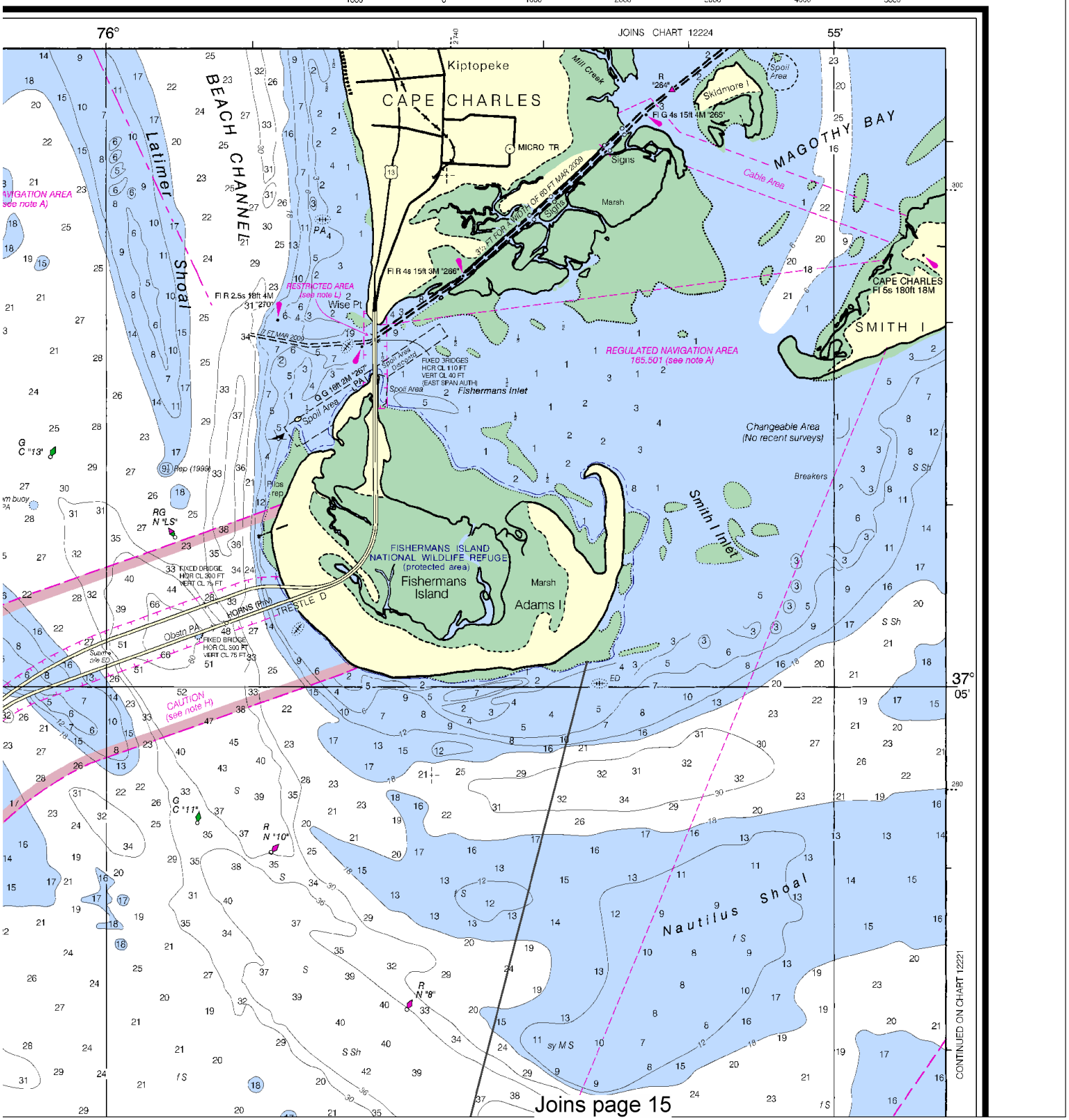
SCALE 1:10,000

Nautical Miles

1 0 1 2 3

Yards

1000 0 1000 2000 3000 4000 5000



Joins page 15

"CB" on the south end, or Chesapeake Bay Entrance Lighted Whistle Buoy "CH", on the north end of the route;

Avoid, as far as practicable, overtaking other ships operating in the deep-water route;

Keep as near to the outer limit of the route which lies on the starboard side as is safe and practicable.

All other ships approaching the Chesapeake Bay traffic separation scheme should use the appropriate inbound or outbound traffic lane of the traffic separation scheme.

Traffic within the precautionary area may consist of vessels operating between Thimble Shoal and Chesapeake Channels and one of the established traffic lanes. Mariners are advised to exercise extreme care in navigating within this area. The normal Pilot Boarding Area is outlined by a magenta band.

NOTE H

CAUTION

The Chesapeake Bay Bridge-Tunnel Complex has on several occasions suffered damage from vessels due to adverse weather conditions. Currents in excess of three knots can be expected in the area. Mariners transiting this area are urged to be particularly alert in regards to the weather situation. The National Weather Service provides 24 hour weather broadcasting on 162.55 MHz. The Local Marine Operator also transmits weather information at 0100, 0700, 1300 and 1900 local time on 2538 and 2450 kHz. Transmitting schedules are subject to change, see Notice to Mariners. Maneuvering in close proximity of the bridge-tunnel complex is discouraged.

HAMPTON, PHOEBUS AND WILLOUGHBY CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO MAY 2009

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
HAMPTON RIVER ENTRANCE CHANNEL	12.2	13.0	11.2	7-08	200	1.1	12
HAMPTON REACH	8.3	11.5	10.2	7-08	150	1.2	12
SUNSET CREEK	A10.2	A11.4	A11.1	7-08	100-80	0.5	12
PHOEBUS CHANNEL	12.5	12.1	11.7	6-03	150	0.7	12
WILLOUGHBY CHANNEL	3.3	2.9	9.6	5-09	B300	1.4	10

A. EXCEPT FOR SHOALING TO 2.0 FEET FOR THE LAST 200 FEET OF THE PROJECT.
B. CHANNEL WIDTH MAINTAINED AT 200 FEET SOUTH OF 36°58'43.0"N, 76°18'38.5"W.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Joins page 4

Joins page 16

JOINS CHART 12248

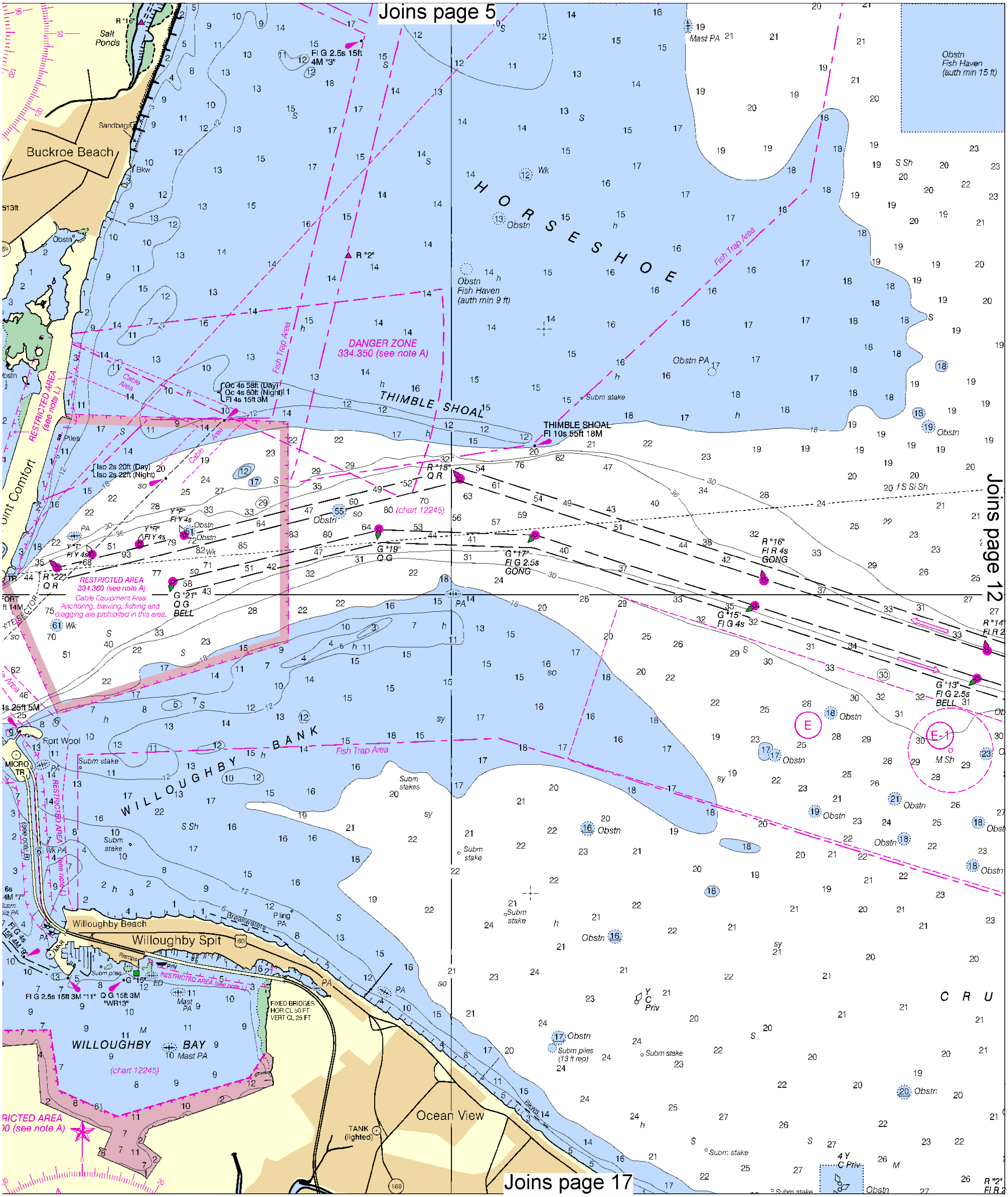
NOTE B
HAMPTON ROADS TUNNEL APPROACH SPANS
HOR CL 45 FT
VERT CL 10 FT

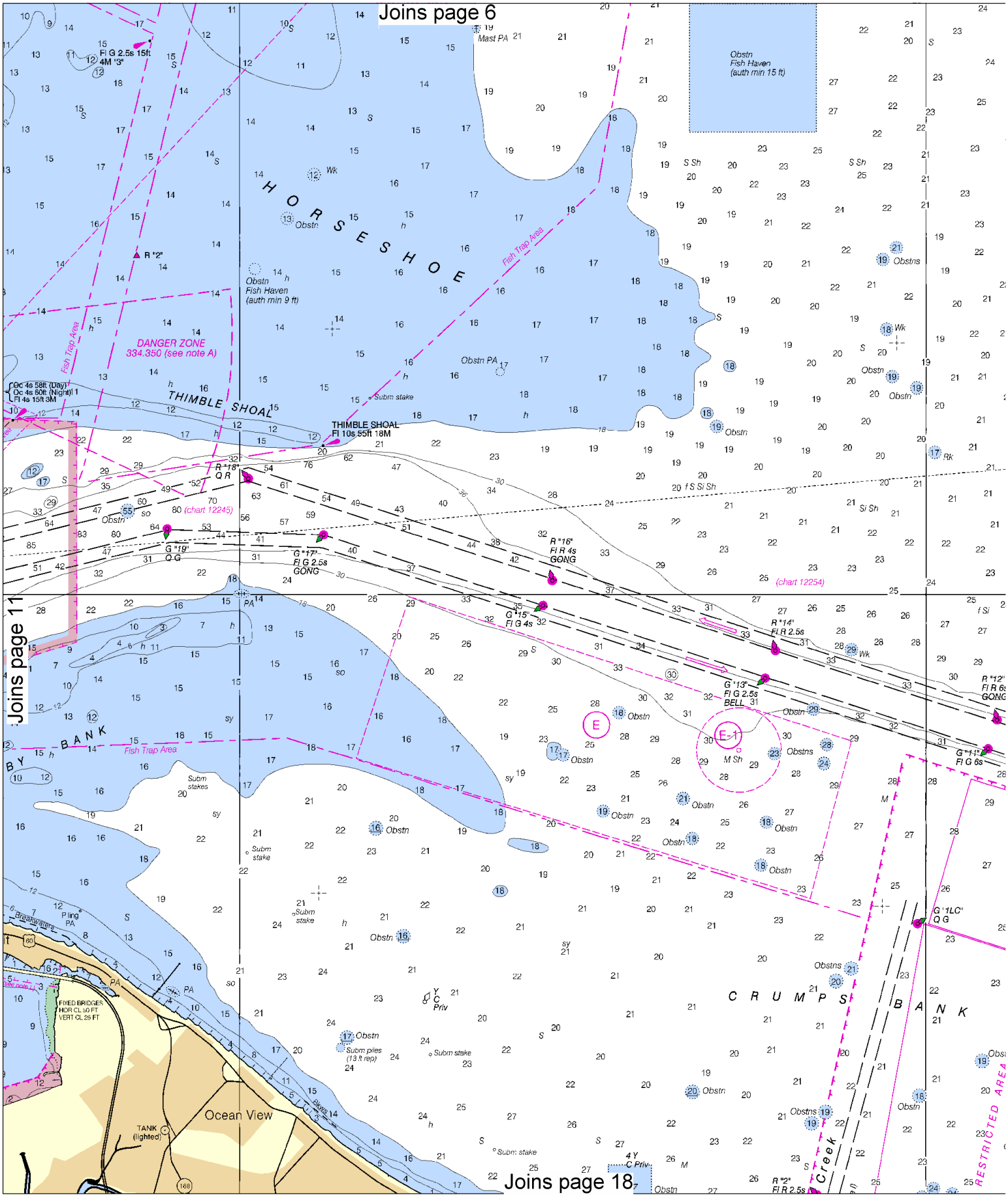
Printed at reduced scale.

SCALE 1:40,000

See Note on page 5.

North


Joins page 5
Joins page 12
Joins page 17
Salt Ponds
Buckroe Beach
Sandbags
Point Comfort
HORSESHOE
THIMBLE SHOAL
THIMBLE SHOAL
Fl 10s 55ft 18M
DANGER ZONE
334.350 (see note A)
Obstn
Fish Haven
(auth min 9 ft)
Obstn
Fish Haven
(auth min 15 ft)
Fish Trap Area
Cable Area
RESTRICTED AREA
(see note L)
RESTRICTED AREA
334.360 (see note A)
Cable Equipment Area
Anchoring, trawling, fishing and dragging are prohibited in this area.
Fl G 2.5s 15ft
4M "3"
R "2"
Oc 4s 58ft (Day)
Oc 4s 50ft (Night)
Fl 4s 15ft 3M
Iso 2s 20ft (Day)
Iso 2s 22ft (Night)
R "18"
Q R
G "19"
Q G
G "17"
Fl G 2.5s
GONG
R "16"
Fl R 4s
GONG
G "15"
Fl G 4s
G "13"
Fl G 2.5s
BELL
R "14"
R "22"
Q R
G "21"
Q G
BELL
(chart 12245)
Fort Wool
WILLOUGHBY BANK
Willoughby Beach
Willoughby Spit
WILLOUGHBY BAY
(chart 12245)
Fl G 2.5s 15ft 3M "11"
Q G 15ft 3M
"WR13"
RESTRICTED AREA (see note L)
FIXED BRIDGES
HOR CL 50 FT
VERT CL 25 FT
Breakwaters
TANK
(lighted)
Ocean View
Subm stake
Subm piles
(13 ft rep)
Mast PA
C R U
Y C Priv
4 Y C Priv



North

Printed at reduced scale.

~~SCALE 1:40,000~~

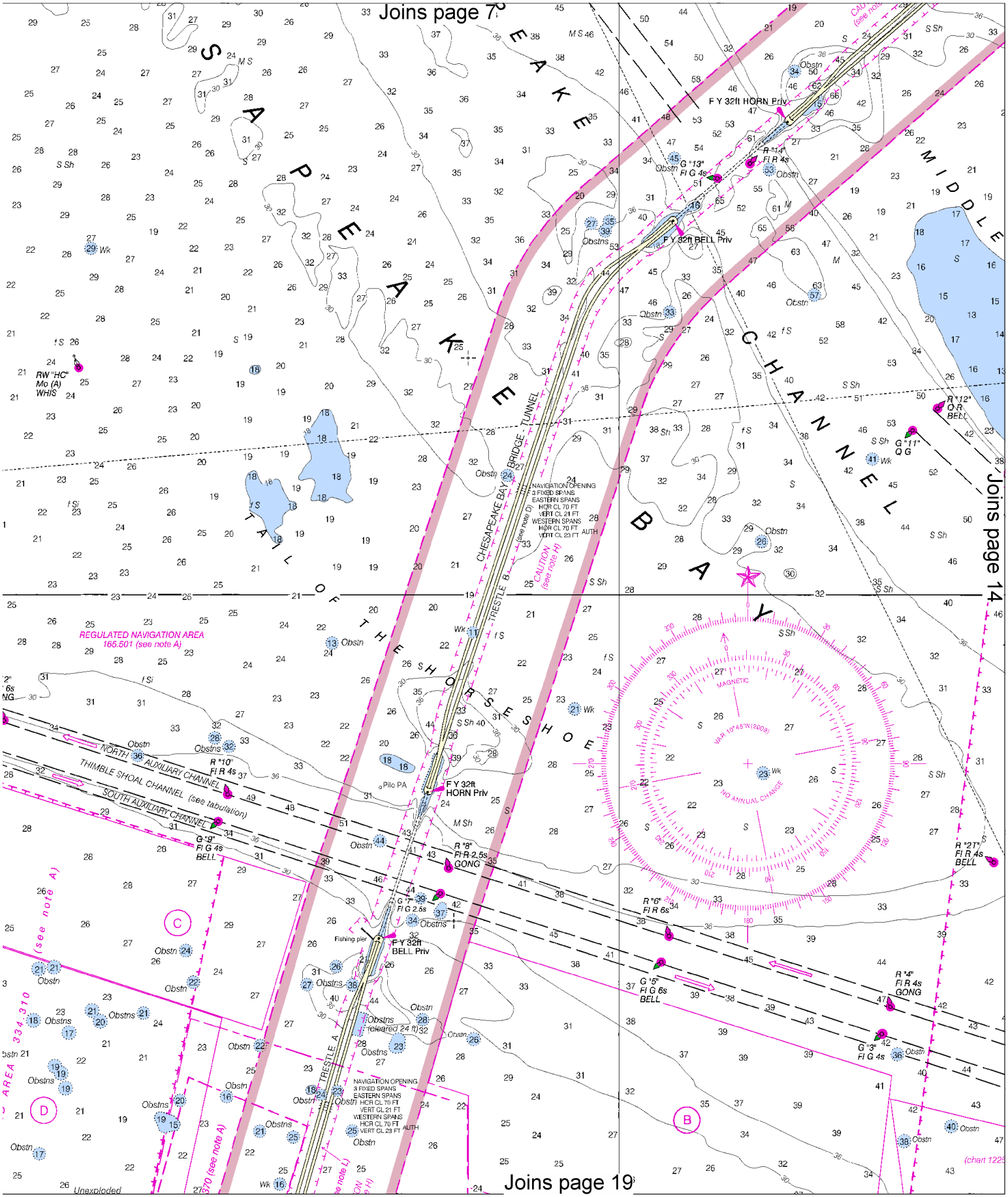
Nautical Miles

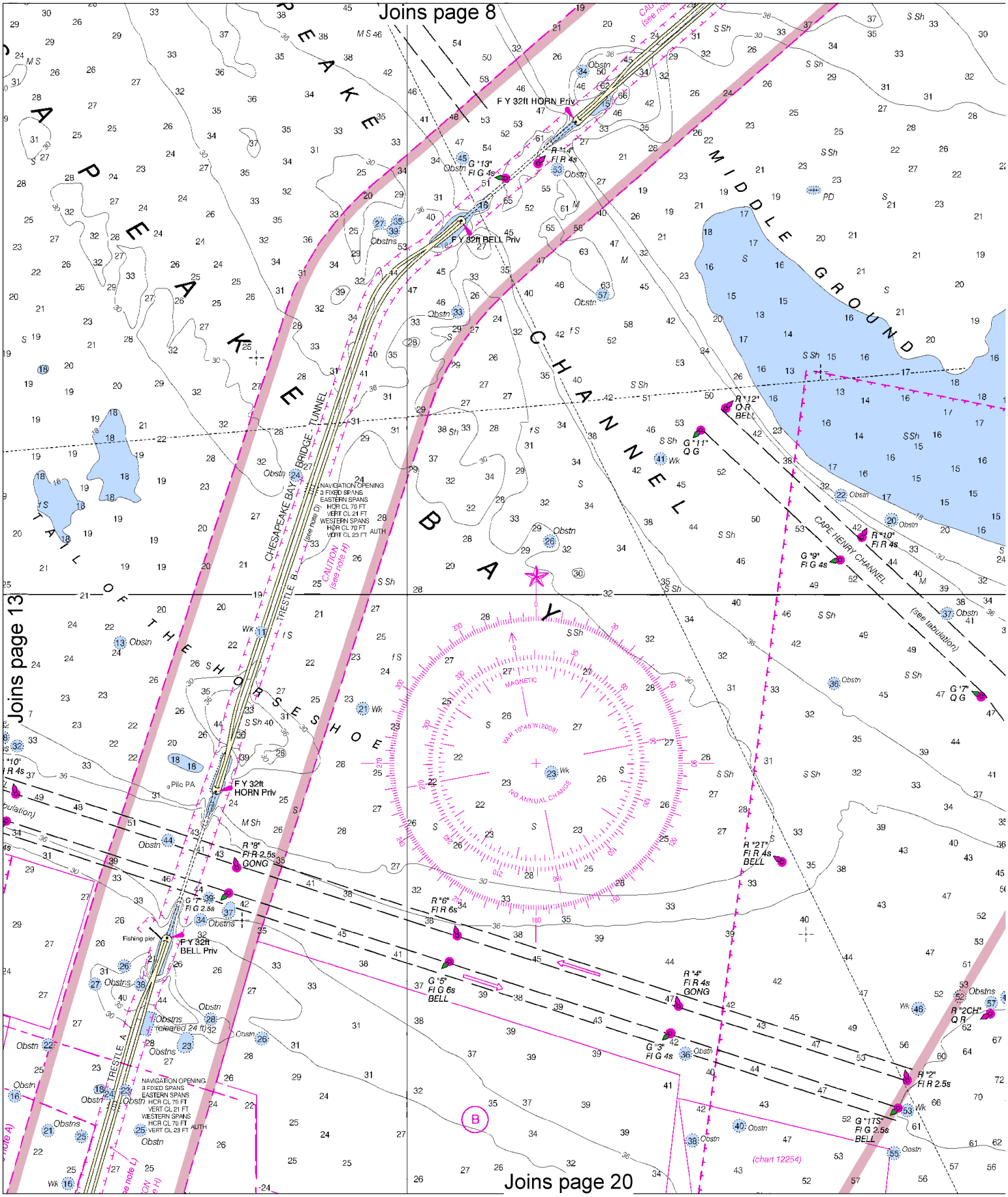
1 ½ 0 1 2 3

Yards

1000 0 1000 2000 3000 4000 5000

See Note on page 5.


Joins page 7
Joins page 14
Joins page 19
SAPEAKE BEACH
MIDDLE CHANNEL BAY
TAIL OF THE THE SHORE
CHESAPEAKE BAY BRIDGE - TUNNEL
TRESTLE A
TRESTLE B
NAVIGATION OPENING
3 FIXED SPANS
EASTERN SPANS
HOR CL 70 FT
VERT CL 21 FT
WESTERN SPANS
HOR CL 70 FT
VERT CL 23 FT AUTH
REGULATED NAVIGATION AREA
165.501 (see note A)
THIMBLE SHOAL CHANNEL
NORTH AUXILIARY CHANNEL
SOUTH AUXILIARY CHANNEL (see tabulation)
F Y 32ft HORN Priv
F Y 32ft BELL Priv
F Y 32ft HORN Priv
F Y 32ft BELL Priv
R "14" Fl R 4s
G "13" Fl G 4s
R "12" Q R BELL
G "11" Q G
R "10" Fl R 4s
G "9" Fl G 4s BELL
R "8" Fl R 2.5s GONG
G "7" Fl G 2.5s
R "6" Fl R 6s
G "5" Fl G 6s BELL
R "4" Fl R 4s GONG
G "3" Fl G 4s
R "21" Fl R 4s BELL
RW "HC" Mo (A) WHIS
Fishing pier
Pilo PA
Obstn
Obstns
Wk
Unexploded
MAGNETIC
VAR 10°45'W (2009)
NO ANNUAL CHANGE
(see note A)
(see note D)
(see note H)
(see note J)
(chart 1225)



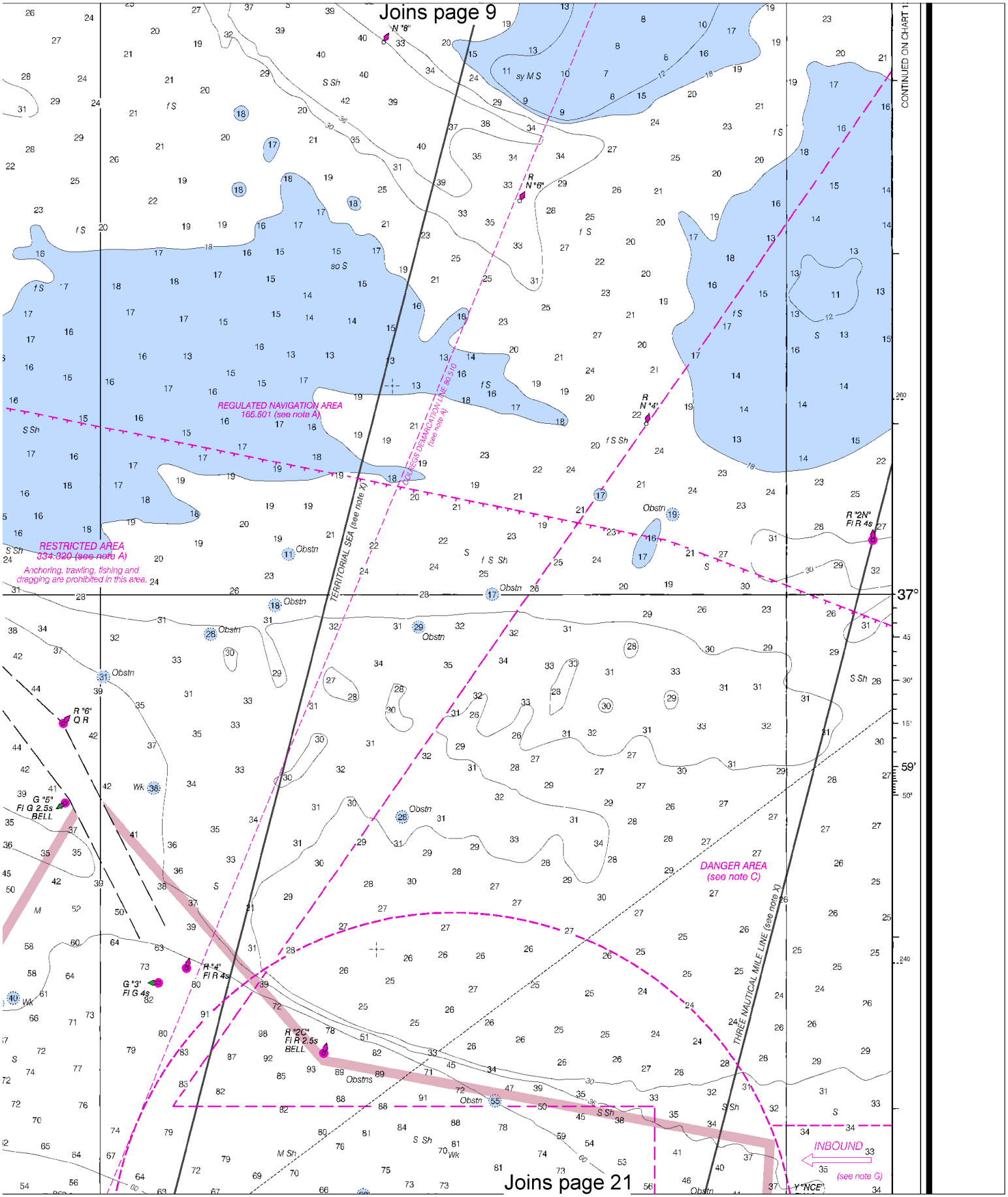
North

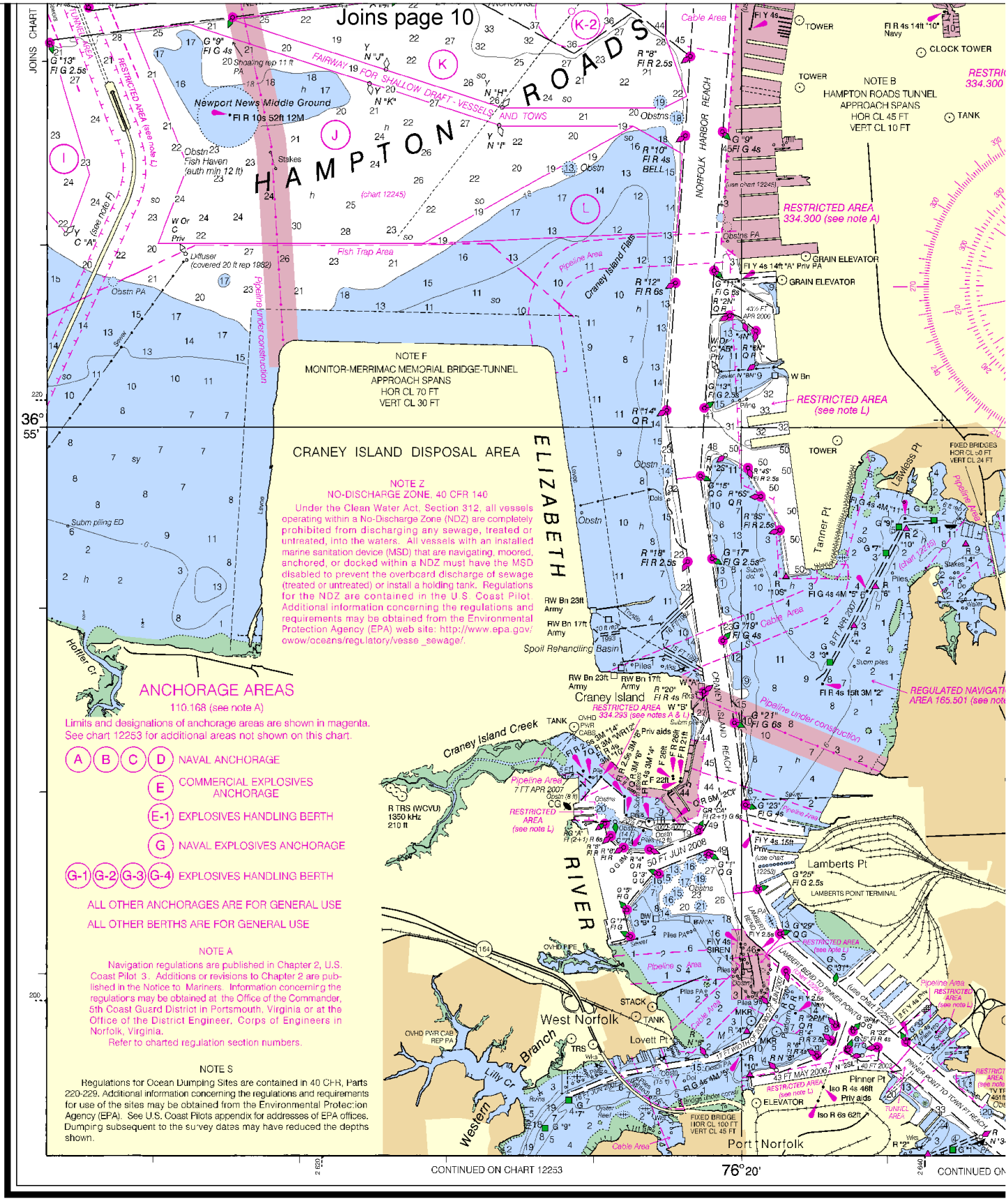
Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.


Joins page 9
CONTINUED ON CHART 1
REGULATED NAVIGATION AREA
165.501 (see note A)
RESTRICTED AREA
334.320 (see note A)
Anchoring, trawling, fishing and dragging are prohibited in this area.
COLREGS DEMARCATION LINE 80.510 (see note A)
TERRITORIAL SEA (see note X)
THREE NAUTICAL MILE LINE (see note X)
DANGER AREA
(see note C)
INBOUND
(see note G)
37°
59'
Joins page 21



52nd Ed., Sep. / 09 ■ Corrected through NM Sep. 5/09
Corrected through LNM Sep. 1/09

12222

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart up
hand corner are available at nautical
l after the dates shown in the lower left

This nautical chart has bee
Ocean Service encourages use
improving this chart to the Chi
Service, NOAA, Silver Spring,

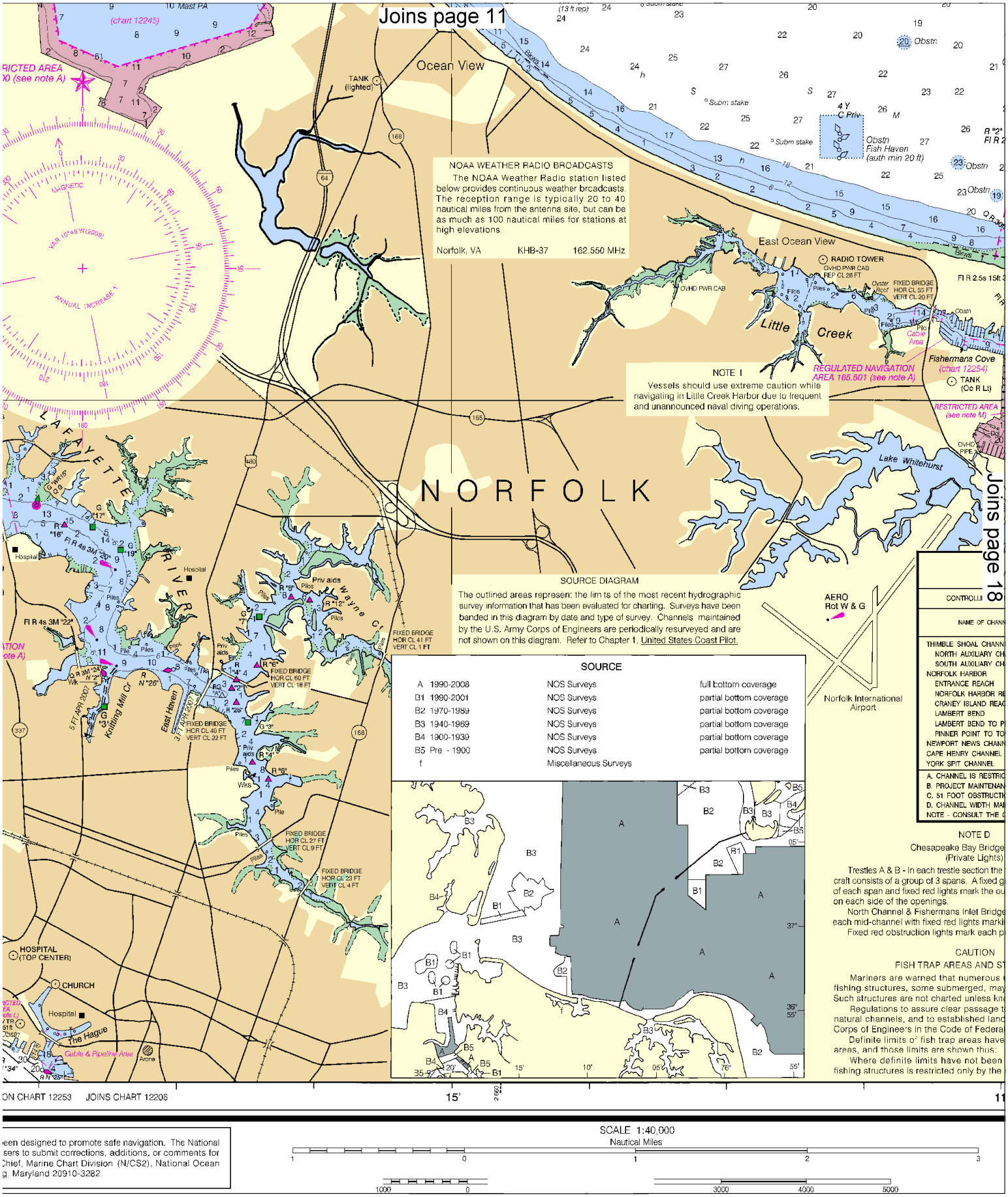
16

North

Printed at reduced scale. ~~SCALE 1:40,000~~ See Note on page 5.

Nautical Miles: 1 ½ 0 1 2 3

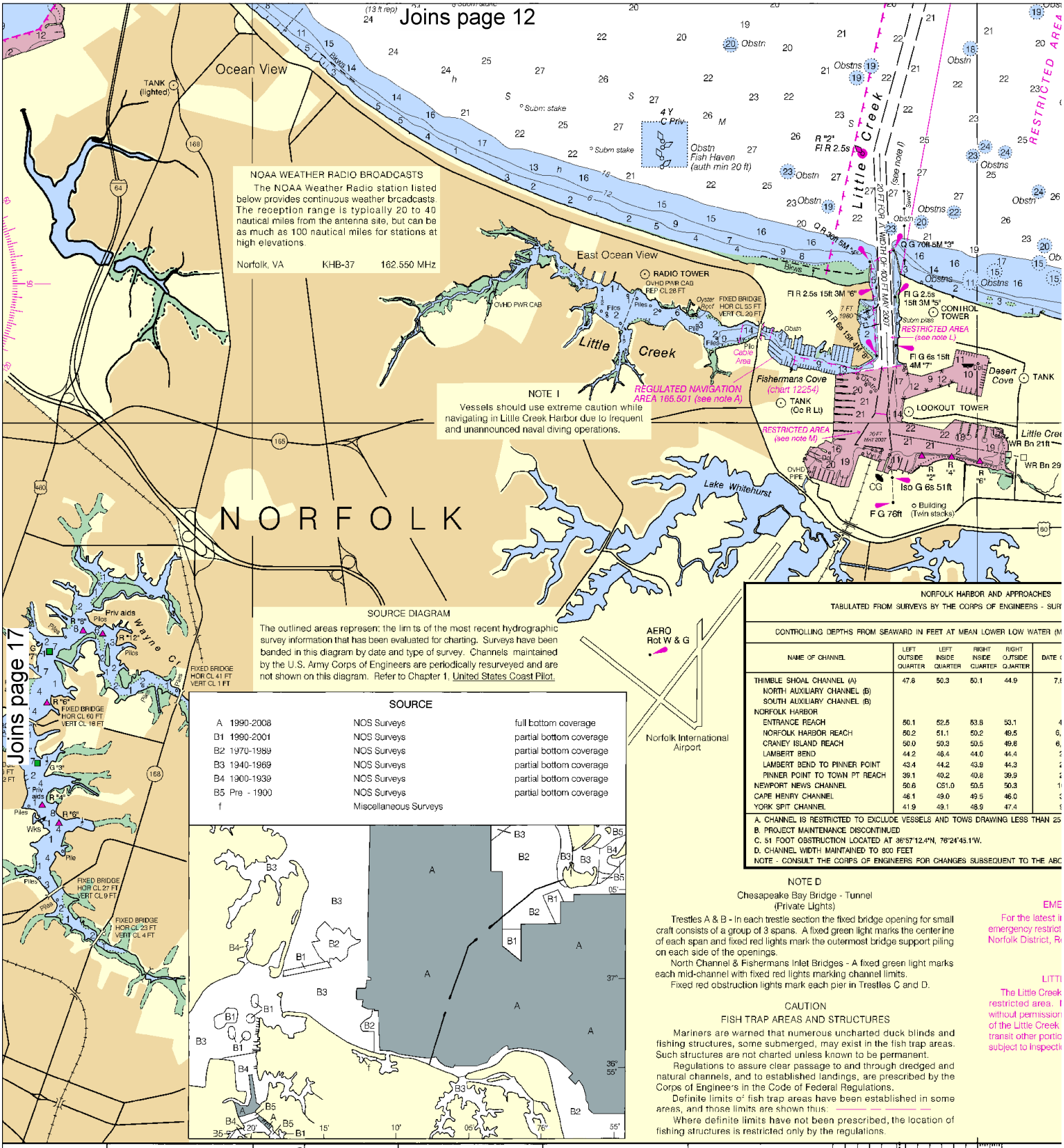
Yards: 1000 0 1000 2000 3000 4000 5000


Joins page 11
Ocean View
East Ocean View
Little Creek
Fishermans Cove
(chart 12254)
Lake Whitehurst
NORFOLK
LAFAYETTE RIVER
Wayne Cr
East Haven
Knitting Mill Cr
Hospital
HOSPITAL
(TOP CENTER)
CHURCH
The Hague
Norfolk International
Airport
AERO
Rot W & G
TANK
(lighted)
RADIO TOWER
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.
Norfolk, VA KHB-37 162.550 MHz
NOTE 1
Vessels should use extreme caution while navigating in Little Creek Harbor due to frequent and unannounced naval diving operations.
REGULATED NAVIGATION AREA 165.501 (see note A)
RESTRICTED AREA (see note M)
SOURCE DIAGRAM
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.
SOURCE
A 1990-2008 NOS Surveys full bottom coverage
B1 1990-2001 NOS Surveys partial bottom coverage
B2 1970-1989 NOS Surveys partial bottom coverage
B3 1940-1969 NOS Surveys partial bottom coverage
B4 1900-1939 NOS Surveys partial bottom coverage
B5 Pre - 1900 NOS Surveys partial bottom coverage
f Miscellaneous Surveys
NOTE D
Chesapeake Bay Bridge
(Private Lights)
CAUTION
FISH TRAP AREAS AND ST
Joins page 18
ON CHART 12253 JOINS CHART 12206
SCALE 1:40,000
Nautical Miles

17

Joins page 12

Joins page 17



NOAA WEATHER RADIO BROADCASTS

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SOURCE

A 1990-2008	NOS Surveys	full bottom coverage
B1 1990-2001	NOS Surveys	partial bottom coverage
B2 1970-1989	NOS Surveys	partial bottom coverage
B3 1940-1969	NOS Surveys	partial bottom coverage
B4 1900-1939	NOS Surveys	partial bottom coverage
B5 Pre - 1900	NOS Surveys	partial bottom coverage
f	Miscellaneous Surveys	

NORFOLK HARBOR AND APPROACHES

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SUR

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (M

NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE
THIMBLE SHOAL CHANNEL (A)	47.8	50.3	50.1	44.9	7,
NORTH AUXILIARY CHANNEL (B)					
SOUTH AUXILIARY CHANNEL (B)					
NORFOLK HARBOR					
ENTRANCE REACH	50.1	52.5	53.8	53.1	4
NORFOLK HARBOR REACH	50.2	51.1	50.2	49.5	6,
CRANEY ISLAND REACH	50.0	50.3	50.5	49.8	6,
LAMBERT BEND	44.2	46.4	44.0	44.4	2
LAMBERT BEND TO PINNER POINT	43.4	44.2	43.9	44.3	2
PINNER POINT TO TOWN PT REACH	39.1	40.2	40.8	39.9	2
NEWPORT NEWS CHANNEL	50.6	C51.0	50.5	50.3	1
CAPE HENRY CHANNEL	46.1	49.0	49.5	46.0	3
YORK SPIT CHANNEL	41.9	49.1	48.9	47.4	9

A. CHANNEL IS RESTRICTED TO EXCLUDE VESSELS AND TOWS DRAWING LESS THAN 25
B. PROJECT MAINTENANCE DISCONTINUED
C. 51 FOOT OBSTRUCTION LOCATED AT 36°57'12.4"N, 76°24'45.1"W.
D. CHANNEL WIDTH MAINTAINED TO 800 FEET
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABO

NOTE D

Chesapeake Bay Bridge - Tunnel
(Private Lights)

Trestles A & B - In each trestle section the fixed bridge opening for small craft consists of a group of 3 spans. A fixed green light marks the center line of each span and fixed red lights mark the outermost bridge support piling on each side of the openings.

North Channel & Fishermans Inlet Bridges - A fixed green light marks each mid-channel with fixed red lights marking channel limits.

Fixed red obstruction lights mark each pier in Trestles C and D.

CAUTION

FISH TRAP AREAS AND STRUCTURES

Mariners are warned that numerous uncharted duck blinds and fishing structures, some submerged, may exist in the fish trap areas. Such structures are not charted unless known to be permanent.

Regulations to assure clear passage to and through dredged and natural channels, and to established landings, are prescribed by the Corps of Engineers in the Code of Federal Regulations.

Definite limits of fish trap areas have been established in some areas, and those limits are shown thus: — — — — —

Where definite limits have not been prescribed, the location of fishing structures is restricted only by the regulations.

EME

For the latest i
emergency restrict
Norfolk District, R

LITTL

The Little Creek
restricted area.
without permission
of the Little Creek
transit other portio
subject to inspecti

15' 11' 10'

SCALE 1:40,000

Nautical Miles

1 0 1 3

Yards

1000 0 1000 2000 5000

Published at Was
U.S. DEPARTMENT
NATIONAL OCEANIC AND ATMO
NATIONAL OCE
COAST SU

North

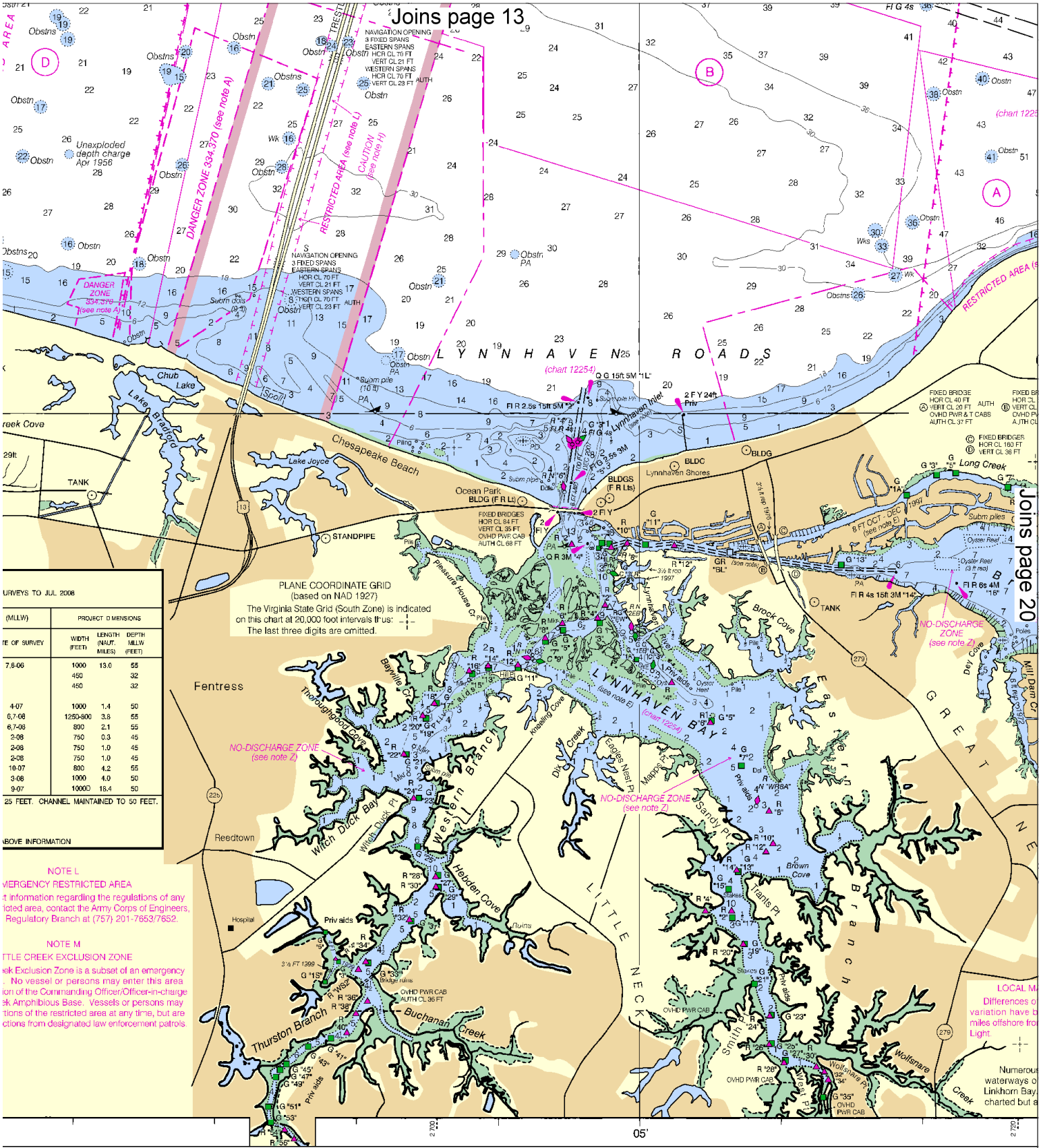
Printed at reduced scale. ~~SCALE 1:40,000~~ See Note on page 5.

Nautical Miles

1 ½ 0 1 2 3

Yards

1000 0 1000 2000 3000 4000 5000



URVEYS TO JUL 2008

(MLLW)	PROJECT DIMENSIONS		
TE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
7,8-06	1000	13.0	55
	450		32
	450		32
4-07	1000	1.4	50
6,7-08	1250-800	3.8	55
6,7-08	800	2.1	55
2-08	750	0.3	45
2-08	750	1.0	45
2-08	750	1.0	45
10-07	800	4.2	55
3-08	1000	4.0	50
9-07	10000	18.4	50

25 FEET. CHANNEL MAINTAINED TO 50 FEET.

ABOVE INFORMATION

NOTE L

MERGENCY RESTRICTED AREA

t information regarding the regulations of any icted area, contact the Army Corps of Engineers, Regulatory Branch at (757) 201-7653/7652.

NOTE M

TTLE CREEK EXCLUSION ZONE

ek Exclusion Zone is a subset of an emergency . No vessel or persons may enter this area ion of the Commanding Officer/Officer-in-charge ek Amphibious Base. Vessels or persons may tions of the restricted area at any time, but are ctions from designated law enforcement patrols.

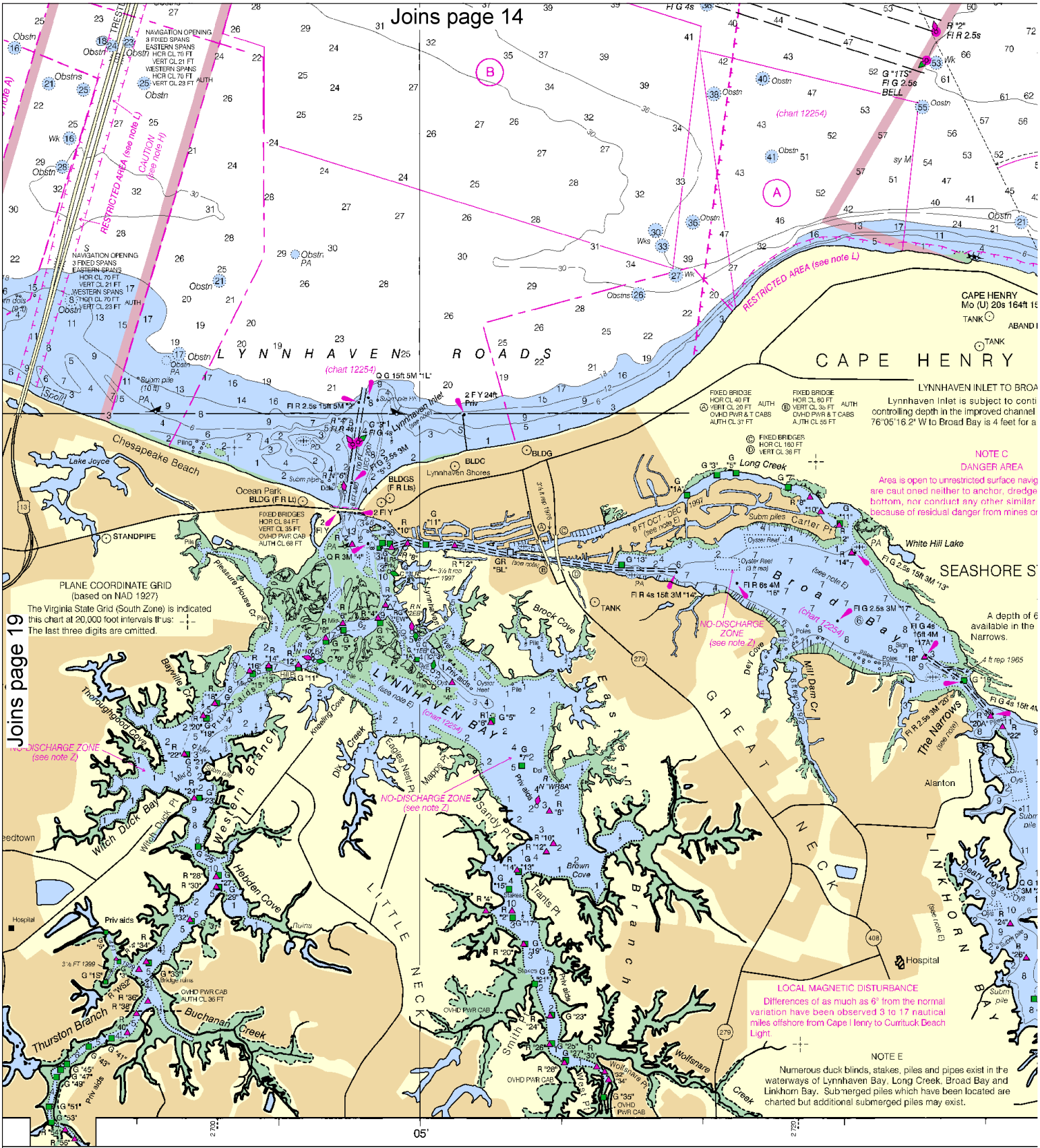
LOCAL MA

Differences o variation have b miles offshore fro Light.

Numerous waterways o Linkhorn Bay, charted but a

ashington, D.C.
IT OF COMMERCE
MOSPHERIC ADMINISTRATION
CEAN SERVICE
SURVEY

SOUNDINGS I



SOUNDINGS IN FEET

FATHOMS
FEET
METERS

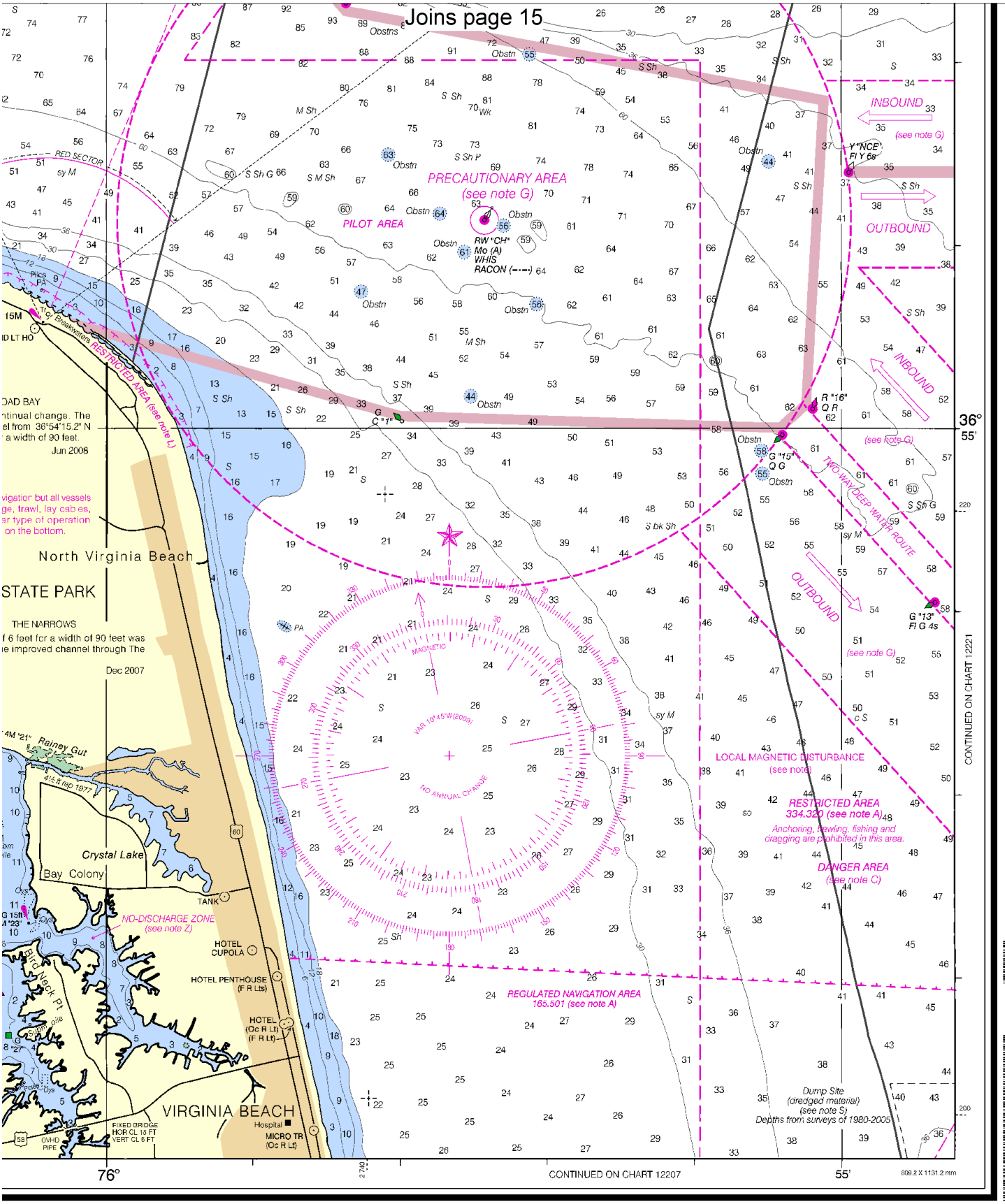
North

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.



Cape Charles to Norfolk Harbor

SOUNDINGS IN FEET - SCALE 1:40,000

12222

ED. NO. 52

NSN 7642014010301 NGA REFERENCE NO. 12AHA12222

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Intership safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22 – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 & 78 – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.

Coast Guard Search & Rescue – 800-418-7314/410-576-2525
Coast Guard Cape Charles – 757-331-2000
Coast Guard Milford Haven – 804-725-2125/3732
Coast Guard Portsmouth – 757-483-8526/8527
Coast Guard Parramore Beach – 757-787-9526/9527
Maryland Natural Resources Police – 410-260-8888
Virginia Marine Police – 800-541-4646

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes, producing over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Electronic Navigational Charts® (ENCs) – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at: www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (RNCs) – RNCs are georeferenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at: www.NauticalCharts.NOAA.gov.

Official BookletCharts™ - BookletCharts™ are reduced scale NOAA charts printed in page-sized pieces. The "home edition" can be downloaded from NOAA for free and printed. The "professional edition", containing additional boating, safety, and educational edition is available for NOAA chart agents or over the Internet.

Official PocketCharts™ – PocketCharts™ are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from official NOAA chart agents or downloaded for free at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated each week by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print on Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Chart No. 1, Nautical Chart Symbols – This reference publication depicts basic chart elements and explains nautical chart symbols and abbreviations. Download it for free at: www.NauticalCharts.NOAA.gov.

Coast Survey Navigation Managers – These ambassadors to the maritime community maintain a regional presence for NOAA and help identify the challenges facing marine transportation and boating. They are listed at http://nauticalcharts.noaa.gov/nsd/reps.htm.

Internet sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.

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